RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 1

Source:

Date Processed by STIC:

ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 06/14/2006 PATENT APPLICATION: US/10/581,413 TIME: 10:28:31

Imput Set : A:\5.1295 Sequence Listing.txt
Output Set: N:\CRF4\06142006\J581413.raw

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3 <110> APPLICANT: KYOWA HAKKO KOGYO CO., LTD.
     5 <120> TITLE OF INVENTION: Pharmaceutical composition comprising recombinant antibody
against CCR4
     7 <130> FILE REFERENCE: 00005.001295
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/581,413
C--> 9 <141> CURRENT FILING DATE: 2006-06-02
     9 <150> PRIOR APPLICATION NUMBER: JP04/018430
    10 <151> PRIOR FILING DATE: 2004-12-03
    12 <150> PRIOR APPLICATION NUMBER: JP2003-406590
                                                                                    ...
    13 <151> PRIOR FILING DATE: 2003-12-04
    15 <150> PRIOR APPLICATION NUMBER: JP2004-155141
    16 <151> PRIOR FILING DATE: 2004-05-25
    18 <160> NUMBER OF SEQ ID NOS: 18
    20 <170> SOFTWARE: PatentIn Ver. 2.1
    22 <210> SEQ ID NO: 1
    23 <211> LENGTH: 360
    24 <212> TYPE: PRT
    25 <213> ORGANISM: Homo sapiens
    27 <400> SEQUENCE: 1
    28 Met Asn Pro Thr Asp Ile Ala Asp Thr Thr Leu Asp Glu Ser Ile Tyr
                                            10
    31 Ser Asn Tyr Tyr Leu Tyr Glu Ser Ile Pro Lys Pro Cys Thr Lys Glu
    33 Gly Ile Lys Ala Phe Gly Glu Leu Phe Leu Pro Pro Leu Tyr Ser Leu
               35
                                    40
    36 Val Phe Val Phe Gly Leu Leu Gly Asn Ser Val Val Leu Val Leu
    37
           50
                               55
                                                    60
    39 Phe Lys Tyr Lys Arg Leu Arg Ser Met Thr Asp Val Tyr Leu Leu Asn
    40 65
                           70
                                                75
                                                                     80
    42 Leu Ala Ile Ser Asp Leu Leu Phe Val Phe Ser Leu Pro Phe Trp Gly
    43
                        85
                                            90
    45 Tyr Tyr Ala Ala Asp Gln Trp Val Phe Gly Leu Gly Leu Cys Lys Met
    46
                                       105
    48 Ile Ser Trp Met Tyr Leu Val Gly Phe Tyr Ser Gly Ile Phe Phe Val
    49
              115
                                   120
                                                       125
    51 Met Leu Met Ser Ile Asp Arg Tyr Leu Ala Ile Val His Ala Val Phe
           130
                              135
    54 Ser Leu Arg Ala Arg Thr Leu Thr Tyr Gly Val Ile Thr Ser Leu Ala
                          150
                                               155
    57 Thr Trp Ser Val Ala Val Phe Ala Ser Leu Pro Gly Phe Leu Phe Ser
                      165
                                           170
    60 Thr Cys Tyr Thr Glu Arg Asn His Thr Tyr Cys Lys Thr Lys Tyr Ser
                                       185
                                                            190
    63 Leu Asn Ser Thr Thr Trp Lys Val Leu Ser Ser Leu Glu Ile Asn Ile
```

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195
                              200
  66 Leu Gly Leu Val Ile Pro Leu Gly Ile Met Leu Phe Cys Tyr Ser Met
  67 210
                 215
  69 Ile Ile Arg Thr Leu Gln His Cys Lys Asn Glu Lys Lys Asn Lys Ala
  70 225
                      230
                                         235
  72 Val Lys Met Ile Phe Ala Val Val Leu Phe Leu Gly Phe Trp Thr
 ,73 . .
                  245
                                      250 ... .. 255
  75 Pro Tyr Asn Ile Val Leu Phe Leu Glu Thr Leu Val Glu Leu Glu-Val
     260
                                                    270
                                  265
  78 Leu Gln Asp Cys Thr Phe Glu Arg Tyr Leu Asp Tyr Ala Ile Gln Ala
          275
                              280
                                                285
  81 Thr Glu Thr Leu Ala Phe Val His Cys Cys Leu Asn Pro Ile Ile Tyr
                           295
                                             300
  84 Phe Phe Leu Gly Glu Lys Phe Arg Lys Tyr Ile Leu Gln Leu Phe Lys
                       310
                                          315
  87 Thr Cys Arg Gly Leu Phe Val Leu Cys Gln Tyr Cys Gly Leu Leu Gln
                   325
                                    330
  90 Ile Tyr Ser Ala Asp Thr Pro Ser Ser Ser Tyr Thr Gln Ser Thr Met
. . . 91
                                   345 ... 350 ...
 93 Asp His Asp Leu His Asp Ala Leu
          355 '
  96 <210> SEQ ID NO: 2
  97 <211> LENGTH: 28
  98 <212> TYPE: PRT
  99 <213> ORGANISM: Homo sapiens
  101 <400> SEQUENCE: 2
  102 Asn Pro Thr Asp Ile Ala Asp Thr Thr Leu Asp Glu Ser Ile Tyr Ser
  103 1
                                       10
  105 Asn Tyr Tyr Leu Tyr Glu Ser Ile Pro Lys Pro Cys
  106
               20
  109 <210> SEQ ID NO: 3
  110 <211> LENGTH: 18
  111 <212> TYPE: PRT
  112 <213> ORGANISM: Homo sapiens
  114 <400> SEQUENCE: 3
  115 Asp Glu Ser Ile Tyr Ser Asn Tyr Tyr Leu Tyr Glu Ser Ile Pro Lys
  116 1
  118 Pro Cys
  121 <210> SEQ ID NO: 4
  122 <211> LENGTH: 15
  123 <212> TYPE: PRT
 124 <213> ORGANISM: Homo sapiens
 126 <400> SEQUENCE: 4
 127 Asp Glu Ser Ile Tyr Ser Asn Tyr Tyr Leu Tyr Glu Ser Ile Pro
 128 1
                     5
                                       10
 131 <210> SEQ ID NO: 5
 132 <211> LENGTH: 5
 133 <212> TYPE: PRT
 134 <213> ORGANISM: Mus musculus
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136 <400> SEQUENCE: 5
137 Asn Tyr Gly Met Ser
138
     1
 141 <210> SEQ ID NO: 6
142 <211> LENGTH: 17
 143 <212> TYPE: PRT
 144 <213> ORGANISM: Mus musculus
146 <400> SEQUENCE: 6
147 Thr Ile Ser Ser Ala Ser Thr Tyr Ser Tyr Tyr Pro Asp Ser Val Lys
148
    1
          5 . 10
150 Gly
153 <210> SEQ ID NO: 7
154 <211> LENGTH: 10
155 <212> TYPB: PRT
156 <213> ORGANISM: Mus musculus
158 <400> SEQUENCE: 7
159 His Ser Asp Gly Asn Phe Ala Phe Gly Tyr
160 1 5 10
163 <210> SEQ ID NO: 8
164 <211> LENGTH: 16
165 <212> TYPE: PRT
166 <213> ORGANISM: Mus musculus
168 <400> SEQUENCE: 8
169 Arg Ser Ser Arg Asn Ile Val His Ile Asn Gly Asp Thr Tyr Leu Glu
170 1
                                    10
173 <210> SEQ ID NO: 9
174 <211> LENGTH: 7
175 <212> TYPE: PRT
176 <213> ORGANISM: Mus musculus
178 <400> SEQUENCE: 9
179 Lys Val Ser Asn Arg Phe Ser
180 1
        5
183 <210> SEQ ID NO: 10
184 <211> LENGTH: 9
185 <212> TYPE: PRT
186 <213> ORGANISM: Mus musculus
188 <400> SEQUENCE: 10
189 Phe Gln Gly Ser Leu Leu Phe Trp Thr
190 1
193 <210> SEQ ID NO: 11
194 <211> LENGTH: 138
195 <212> TYPE: PRT
196 <213> ORGANISM: Mus .musculus
198 <400> SEQUENCE: 11
199 Met Asn Leu Gly Leu Ser Leu Ile Phe Leu Ala Leu Ile Leu Lys Gly
200 1 5 10 15
202 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Met Lys
203 20
                                 25
205 Pro Gly Gly Ser Leu Lys Ile Ser Cys Ala Ala Ser Gly Phe Ile Phe
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```
206
                                 40
  208 Ser Asn Tyr Gly Met Ser Trp Val Arg Gln Thr Pro Asp Met Arg Leu
                             55
                                                 60
  211 Glu Trp Val Ala Thr Ile Ser Ser Ala Ser Thr Tyr Ser Tyr Tyr Pro
  212 65
                         70
                                             75
  214 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Asn
.... 215.
                      85
                                         217 Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ser Glu Asp Thr Gly Ile
                 100
                                    105
                                                       110
  220 Tyr Tyr Cys Gly Arg His Ser Asp Gly Asn Phe Ala Phe Gly Tyr Trp
       115
                                120
  223 Gly Arg Gly Thr Leu Val Thr Val Ser Ala
  224 130
                            135
  227 <210> SEQ ID NO: 12
  228 <211> LENGTH: 132
  229 <212> TYPE: PRT
  230 <213> ORGANISM: Mus musculus
  232 <400> SEQUENCE: 12
  233 Met Lys Leu Pro Val Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala
            · "5·
                                        10 15
  234 1
  236 Ser Ser Ser Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val
         . 20
                                   . 25
  239 Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Arg Asn Ile
  240 35
                                 40
  242 Val His Ile Asn Gly Asp Thr Tyr Leu Glu Trp Tyr Leu Gln Arg Pro
  243 50
                             55
                                                 60
  245 Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser
  246 65
                         70
  248 Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
                      85
  251 Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Cys
  252
                                    105
                                                        110
  254 Phe Gln Gly Ser Leu Leu Pro Trp Thr Phe Gly Gly Gly Thr Arg Leu
  255
             115
                                120
  257 Glu Ile Arg Arg
  258
         130
  261 <210> SEQ ID NO: 13
  262 <211> LENGTH: 119
  263 <212> TYPE: PRT
  264 <213> ORGANISM: Artificial Sequence
  266 <220> FEATURE:
  267 <223> OTHER INFORMATION: Synthetic peptide
  269 <400> SEQUENCE: 13 -
  270 Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Arg
  271 1
                     5
                                         10
  273 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ile Phe Ser Asn Tyr
                 20
                                     25
  276 Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
              35
```

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Input Set: A:\5.1295 Sequence Listing.txt
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279 Ala Thr Ile Ser Ser Ala Ser Thr Tyr Ser Tyr Tyr Pro Asp Ser Val 50 55 282 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 70 75 285 Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 288 Ala Arg His Ser Asp Gly Asn Phe Ala Phe Gly Tyr Trp Gly Gln Gly 105 100 291 Thr Leu Val Thr Val Ser Ser 115 295 <210> SEQ ID NO: 14 296 <211> LENGTH: 119 297 <212> TYPE: PRT 298 <213> ORGANISM: Artificial Sequence 300 <220> FEATURE: 301 <223> OTHER INFORMATION: Synthetic peptide 303 <400> SEQUENCE: 14 304 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 305 1 ... 5 307 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr 30 20 25 310 Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 45 40 313 Ser Thr Ile Ser Ser Ala Ser Thr Tyr Ser Tyr Tyr Pro Asp Ser Val 314 50 . 55 60 316 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 70 317 65 319 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 322 Ala Arg His Ser Asp Gly Asn Phe Ala Phe Gly Tyr Trp Gly Gln Gly 110 100 105 325 Thr Leu Val Thr Val Ser Ser 326 115 329 <210> SEQ ID NO: 15 330 <211> LENGTH: 112 331 <212> TYPE: PRT 332 <213> ORGANISM: Artificial Sequence 334 <220> FEATURE: 335 <223> OTHER INFORMATION: Synthetic peptide 337 <400> SEQUENCE: 15 338 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly 339 1 5 10 341 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Arg Asn Ile Val His Ile 342 20 25 344 Asn Gly Asp Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser 35 40 345 347 Pro Gln Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro 348 50 55 350 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile

VERIFICATION SUMMARY

DATE: 06/14/2006

PATENT APPLICATION: US/10/581,413

TIME: 10:28:32

Input Set : A:\5.1295 Sequence Listing.txt
Output Set: N:\CRF4\06142006\J581413.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date